

AUG 10 2001

Via Facsimile and Mail

Gwen B. Zervas, P.E.,
Case Manager
Bureau of Federal Case Management
New Jersey Department of Environmental Protection
401 East State Street
Trenton, New Jersey 08625

Re: Review of Revised Workplan for Delineating and Characterizing Elevated Lead Concentrations in Soil, letter regarding Enhancement of Free Product Recovery, and the Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater, all dated May 2001, for the Dayco/L.E. Carpenter Site, Wharton, New Jersey

Dear Ms. Zervas,

EPA has reviewed the above referenced work plans, and is pleased to provide the following comments for your consideration.

Revised Workplan for Delineating and Characterizing Elevated Lead Concentrations in Soil:

1. The Lead Delineation Work Plan presents an acceptable strategy and we recommend that it be implemented as soon as practical, before adverse weather sets in. The one area where we recommend a minor amendment is the background sampling approach. The work plan defers the selection of background sampling locations to a later date, however, as noted in previous New Jersey Department of Environmental Protection (NJDEP) and EPA's comment letters (see NJDEP's letter to Mr. Christopher Anderson, dated, Dec 21, 2000, and EPA letter dated October 26, 2000), specific locations should be selected and approved by the agencies in advance in order to ensure that all parties agree that they are

346026



CONCURRENCES

Name: CIPOT	Init: BM	Date: 8/10/01	Filename: 3PLANS-01RVW.LTR.WPD
Symbol	SNJRS		
Surname	CIPOT		
Date	8/10/2001		

representative. In addition, since it is likely that mine tailings may be present throughout the study area, it is suggested that a total of 10 samples be collected instead of the scoped 5, so as to better reflect background conditions.

As outlined in section 2, a feasibility study (FS) will need to be conducted to evaluate potential alternatives in the event that the Potentially Responsible Parties (PRPs) want to recommend a change to the current ROD remedy. As part of the FS, human health and ecological risk assessments will also need to be addressed.

Enhancement of Free Product Recovery:

2. The Enhancement of Free Product Recovery letter proposes the installation of a trench through the long axis of the free product area. As a conceptual design, the approach is adequate. However, as you know, the PRP's previous work plan dated August 15, 2000, outlined the bench and pilot testing of three main technologies; a trench was one of the three proposed technologies. While EPA certainly agrees with the concept and testing of a trench technology, we prefer the more varied approach previously outlined, as it is a more efficient way to achieve final cleanup of the free product. We are concerned that should the trench not work adequately, it will lead to continued delays, as both the NJDEP and EPA will have to repeat the timely process of recommending the testing of an alternative technology, waiting for the PRP to prepare and submit a work plan, and similarly review and provide comments. Instead, all appropriate technologies could be approved and tested at the same time, as proposed in the August 2000 work plan.

As previously stated, while we think that the trench is a feasible idea, a feasibility study should be conducted as the better way to go, so as to evaluate a number of alternatives, and a full design should be prepared and submitted. Comments to this effect were outlined in various comment letters, including EPA's letters of September 12, October 6, October 10, and October 26, 2000. At this point, an evaluation of alternatives has not been done and it is not clear that it is prudent to forgo them, as requested in the present work plan. In addition, the NJDEP's undated faxed letter to the PRP (having a fax stamp of May 5, 2001), requested the same of the PRP. The PRP's August 15, 2000, work plan outlined scopes of work for the conduct of several technologies, however, not only does the latest submittal

fail to address EPA's comments, the evaluation of all but the trench technology were dropped from the plan, without so much as a single explanation. It is not clear why the PRP did not address our comments, and we would like to ask that the PRP formally explain the proposed change in scope of work, as well as our previous comments. Moreover, EPA would like the PRP to clarify how the evaluation of other alternatives will be handled as part of the upcoming site process.

Regarding the trench technology, such a design would need to include greater detail such as including full drawings of construction activities, plans for sampling the excavated materials for disposal purposes, and in general, should provide information on how the trench will be constructed and operated. In addition, a health and safety plan is also necessary covering potential exposure to contaminants during excavation and disposal activities, and from entry into the trench (as is implied in the present document). In addition, either the current plan should outline the handling of the construction water/groundwater which is to be treated with activated carbon, or a new work plan can be submitted to cover these. In addition, as the entire work area is expected to contain elevated levels of lead, a sampling for lead will also be required.

In addition, please note that if the trench proposal is accepted by the NJDEP, specific criteria will need to be established which will serve as a trigger for additional efforts. For example, the criteria might address when it will become necessary to rehabilitate the trenches (in the event they become silted or overgrown), or to enhance reduced flow into the trench. In addition, criteria should be established which indicate that the source has been adequately remediated. Any of the above may trigger more active efforts to address the dissolved phase plume.

Related to the above, if a Focused Feasibility Study (FFS) is to be prepared, it should include additional options such as in-situ oxidation and technologies which would enhance flow toward the trench. Note that in-situ oxidation would also likely aid in addressing the dissolved phase plume by oxygenation of the anaerobic area under the NAPL. It may also result in the mobilization of lead.

3. In addressing the dissolved phase of the groundwater plume, it is appropriate to more fully document the potential for natural attenuation at the site. As noted in the Record of

Decision (ROD), fully addressing the plume will not be possible until the separate phase source has been removed. Until this occurs, efforts should be geared towards insuring that the dissolved phase plume is controlled.

Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater:

The work plan for Supplemental Investigation of Natural Attenuation is a good framework. The goals of the study would be to document the consistency of conditions favorable to degradation and to clearly establish that the plume is in steady state or shrinking. The following are specific comments on the details of the work plan.

- a. The work plan states that wells will be drilled using air-rotary techniques. For shallow wells such as these, EPA prefers hollow stem auger methods. If these have proved problematic at the site in the past, then air-rotary is acceptable.
- b. When surveying new wells, please include the ground surface elevation next to each well. The work plan also should mention that the wells will be located horizontally. It is assumed that this method is intended, but the text does not clearly state it.
- c. It should be noted that bacterial plate counts are not required by the EPA at this time. If these are desired by the NJDEP or by L.E. Carpenter, of course, they should remain in the scope of work.
- d. Analyses for ethene and ethane are typically included to evaluate the breakdown of chlorinated solvents. Their utility here is unclear.
- e. Natural attenuation parameters should be collected quarterly. This will allow for the evaluation of any trends, as well as possible seasonal variations.
- f. Ferrous iron concentrations typically change quickly after a sample is removed from the subsurface. These analyses should be conducted in the field using a test kit.
- g. Turbidity should be added to the list of field parameters to be measured during sampling events. This provides an additional check on field parameter

stability and aids in documenting that a well is properly developed/not damaged at the time of sample collection.

- h. Summary water levels should be collected across the site in conjunction with the sampling events.
- i. As stated in the text, preliminary inputs to the groundwater model should be discussed and agreed upon prior to initiating work on the model. Degradation rates will be very difficult to accurately define, leaving considerable uncertainty in the resulting natural attenuation time frames. Much of the value from the modeling will lie in runs which do not include a degradation term. If degradation is important, these runs should show that the plume has not migrated the distances expected without degradation. Please be sure to include this in documenting the results. Actual forward projections will be viewed only as estimates, the accuracy of which are qualified by the uncertainty of the inputs.

If you have any questions or comments on the above, please contact me at (212) 637-4411. Thank you for the opportunity to review the above work plan.

Yours truly,

Stephen Cipot, Remedial Project Manager
Southern New Jersey Remediation Section

bcc: Andy Crossland, PSB
Kim O'Connell, SNJRS
Stephen Cipot, SNJRS